# Conchological Memoranda, No. VI.

May 18, 1871.

PRELIMINARY DESCRIPTIONS OF NEW SPECIES FROM THE WEST COAST OF AMERICA.

By R. E. C. STEARNS.

Monoceros paucilirata: Stearns.

Shell moderately elevated, whorls 4-6; body whorl four-fifths the total length, angulated above and excavated between the angle and the suture; a sharp groove hehind the tooth. Upper whorls cancellated, nucleus smooth. Aperture elongate, purple brown in the throat; outer lip sharp, yellowish, internally denticulated, with a prominent tooth at its outer edge. Columella purple, canal short, umbilicus nearly covered by the columellar callus. Siphonal fasciole strong. Externally painted with longitudinal broad black and narrow whitish streaks, interrupted by the white dental groove and three or four narrow yellowish revolving carinæ, which, except the keel, are inconspicuously elevated. Lon. .55; Lat. .33 in. Habitat—Coronado Islands, off San Diego, California. Hemphill, three specimens.

Ocinebra circumtexta : Stearns.

Shell ovate, solid, sub-turreted, of five convex whorls. Upper whorls cancellated; body whorl traversed by about 14 roughly-rounded revolving costæ, more or less tuberculated at the intersection of the longitudinal ribs, and marked with fine incremental striæ. Last whorl three-fourths the length of the shell; outer lip thickened internally denticulate, external edge crenulated. Columella excavated, light purple or purplish brown; canal short, open or closed in specimens of equal size. Umbilicus obsolete; surface of whorls with faint irregular longitudinal costæ. Color dingy white, with two interrupted black or dark brown bands. Lon. .85; Lat. .5 in. Habitat—Monterey, California; Hemphill, Harford, Gordon, and Stearns, sixteen specimens, mostly immature.

Ocinebra gracillima: Stearns.

Shell small, solid, fusiform, slender; spire subacute; whorls 6-7; body whorl about two-thirds the whole length. Upper part of whorls subangulate, aperture about as long as the spire. Outer lip thickened internally; white, with four prominent denticles. Columellar lip excavated, callous, with a purplish stain showing through the enamel. Canal moderate, closed. Surface smooth, with numerous fine whitish revolving costæ, dotted with brown, the interspaces near the outer lip with brown linear markings. Upper whorls longitudinally nodosely ribbed. General color olivaceous, with patches of yellow. Lon. .5; Lat. .25 in. Habitat—San Diego, California, 10 fms.; Hemphill.

The above are merely preliminary to detailed descriptions hereafter to be published in the American Journal of Conchology.

# Conchological Memoranda, No. VII.

August 28, 1871.

PRELIMINARY DESCRIPTIONS OF NEW SPECIES OF MARINE MOL-LUSCA FROM THE WEST COAST OF NORTH AMERICA.

By ROBERT E. C. STEARNS.

PHOLAS PACIFICA: Stearns.

Shell oblong, beaks two-fifths of length of shell from anterior end; anterior end of valves trlangular, pointed; anterior dorsal edge of valves reflected and folded down on the umbos; lower anterior margin curved, forming a large clliptic-oval gape; posterior end of valves squarely rounded; shell dull chalky white, sculptured in concentric lines, which anteriorly are laminated and posteriorly become extinct; valves radiately ribbed, which also become obsolete at the posterior end; at the intersection of the radiating and concentric lines the sculpture is pectinated; an area below the umbos, nearly or quite destitute of sculpture, which varies much in prominence in different specimens; accessory plate sub-lanceolate and bent down on the beaks, anteriorly prolonged over but not cover- wholly ing the ante-umbonal gape; interior of valves white, enamelled; internal rib short, curved and flattened. Largest specimen, two and six-tenths inches in length, and one and fiveteuths inches in height. Habitat-Alameda, San Francisco Bay, California, where in some places it is common in sandy mud hetweeu tide marks. Numerous specimens collected by Messrs. Harford, Hemphill, Drs. Kellogg and W. P. Gibbons.

PTYCHATRACTUS OCCIDENTALIS: Stearns.

Shell elongated, fusiform, rather slender, whitisb, traversed by narrow, revolving, hrownish threads and much wider intervening spaces; suture distinct, spire tapering; aperture oblong-oval, about half the length of the shell; within white, polished; canal short, nearly straight; columellar obliquely, not strongly plicated; length about threefourths of an inch. Habitat-near the Island of Attou, at the west end of the Aleutian Archipelago.

Fusus (Chrysodomus!) Harfordii Stearns.

Shell solid, elongate, regularly fusiform; spirc elevated, whorls six or seven, moderately couvex, slightly flattened (in outline) above, with a groove or channel following the suture; color, chocolate brown; surface marked by numerous narrow revolving costæ, which alternate in prominence on the body whorl, and longitudinally by fine incremental striæ, and on the upper whorls by obtusely rounded ribs of more or less prominence; aperture ovate, about one-half the length of the shell, polished, white and finely ribbed within; (the outer lip in perfect specimens is probably finely crenulated;) canal short, nearly straight. Lon. 2.1; Lat. .94 in. Number of Specimens, three; two mature, dead, out junior, fresh. Habitat-coast of Meudocino County, near Big Spanish Flat, California, where it was detected by M1. Harford.

Stearns' Conchological Memoranda - A Correction Through inadvertence, the second page of Stearns' Conchological Memoranda No. VII beginning on page 40% of our April issue (vol. 18, no. 4) was printed out of order on page 410. To call attention to this, it is suggested that the following note be placed at the bottom of page 40%:

For page 2 of Conchological Memoranda No. VI see page 410

# Conchological Memoranda. No. VIII.

October 14, 1871.

DESCRIPTION OF A NEW SPECIES OF VERONICELLA FROM NICARAGUA.

BY ROBERT E. C. STEARNS.

## Veronicella, Blainville. Vaginulus, Ferussac.

Veronicella olivaceus: Stearns.

Animal elongated oval, slug-shaped, sides moderately curved, ends obtusely rounded; substance (in alcohol) coriaceous, back convex and granulously rugose; color olive beneath, darker olive above; length of body nearly four times its width; foot linear, not quite as long as, and one third the width of, the body; eye peduneles short, annulated, with rather obscure stumpy (bifarcate?) tentacles below.

Length of largest specimen 1.74 inches. Breadth of largest specimen 51 inch.

Habitat — Nicaragna (Occidental department), where several specimens were collected by Mr. J. A. McNiel.

My collection contains three specimens, and the Museum of the Peabody Academy of Science, at Salem, Mass., numerous examples of this species. In connection with the above measurements, it should be borne in mind that the contraction caused by the alcohol, materially affects the proportions; the animal, when alive, is undoubtedly very much longer, and somewhat broader, than above stated.

This species is found also in the Upper Californian province, a specimen having been collected by me near Lobitos, in the year 1866.

The few species known inhabit tropical or semitropical climates; the form above described is quite distinct from V. Floridana, which is also found in Nicaragua (Eastern department), where it was collected "Under stones, Javate, Chontales; probably the same species, but twice the size of Toro Rapids." Vide paper "On the Land and Fresh Water Shells of Nicaragua, by Ralph Tate"; in American Journal of Conchology, Vol. V, pp. 151-162. The "Toro Rapids" specimens of Mr. Tate's collection, possibly belong to the species herein described, but it is hardly probable that the well marked differences between the latter and V. Floridana could have escaped detection.

#### PLEUROTOMA (DRILLIA) MONTEREYENSIS: Stearns.

Shell small, rather solid, elongate, slender; spire elevated, snb-aeute; whorls, seven to eight moderately rounded: upper portion of larger volutions somewhat eoncavely angulated; suture distinct; color, dark purplish brown or black; surface covered with rather coarse, inconspicuous, revolving costæ, interrupted on the body whorl by rade incremental lines; middle of upper whorls and upper part of body whorl displaying fourteen to fifteen equidistant, longitudinal, nodose, slightly oblique ribs, which are whitish in the specimen before me (being somewhat rubbed) on the larger whorls; on the smaller volutions of the spire a puckering at and following the suture suggests a second indistinct series of notales; aperture less than half the length of the shell; canal short; terminal portion of columella whitish, slightly twisted; posterior sinus, rather broad rounded, and of moderate depth. Mean divergence about 26°. Long. 67 in.; Lat. .24 in. Habitat—Monterey, California, where the single specimen in my cabinet was collected by Mr. Harford and myself in March, 1863. The shell, in its general aspect, resembles the sombre colored species of the Gulf of California and Panama.

#### PLEUROTOMA (DRILLIA) HEMPHILLII: Stearns.

Shell small, smooth, slender, polished; spire long, subacute, rounded at apex; longitudinally marked with inconspicuous, oblique ribs, which are nearly obsolete on the body whorl; number of whorls seven, with well defined sutural line, and just below it a parallel impressed thread-like line; shell of an opaque dingy horn color; incremental lines fine, marked in some specimens with dingy white; mouth obliquely ovate, about onethird the length of the shell; labrum produced, anteriorly somewhat thickened; sinus sutural, deep, calloused; columella thickened at base; canal very short, somewhat produced and twisted; one specimen shows obscure, revolving, impressed lines below the swell of the body whorl; size quite uniform. Lon. 26; Lat. 09 inch. Habitat—Los Todos Santos Bay, Lower California, where several specimens were obtained by Mr. Hemphill, for whom 1 have named this well marked species.

Journal & Argus Print, Petaluma, Cal.

# **NOTES & NEWS**

Soviet Contributions to Malacology in 1974

BY

MORRIS K. JACOBSON

AND

KENNETH J. BOSS

Museum of Comparative Zoology, Harvard University
Cambridge, Massachusetts 02138

THE PRESENT LISTING of articles from the Referativnyy Zhurnal for 1974 represents a continuation of the series which we have been contributing to The Veliger in recent years (see The Veliger 17 (4): 408 - 413). As before, we have assembled the titles under categories (Morphology, Biology and Ecology, etc.) and in several cases have provided some brief remarks on the contents, taking special pains to indicate generic, subgeneric, and specific taxonomic novelties. Starobogatov again contributes new names in such badly overnamed groups (see Boss, 1971, Occ. Papers Moll., Harvard Univ. 3 (40): 81-136) as Pyrgulidae (6 new species found in river drifts), and, with Pirogov and Izzatullaev, several new taxa to the Pisidiidae. Sirenko provides some new taxa in the Polyplacophora, and Moskvicheva found 6 new naiad species in the Amur drainage which already is said to have 36. On the other hand, Kodolova and Logvinenko, using myogens and shell morphology, reduced all the Anodonta from Karelia to the Volga to the 2 species A. cygnea and A. piscinalis. In this connection Kazannikov discussed the contemporary methods for diagnosing freshwater mollusks.

Faunal studies in little known localities, especially in Siberia, as well as elsewhere continue to be made by Frolova (Kazakhstan), Dolgin and Ioganzen (lower Ob, Taz, and Gidansk Peninsula), Kazannikov (Oseti), Nikitina et al. (Ural R.), Zakharenko (Donetz Basin) and others. Land shell faunistics were studied by Krest'yaninov (Chelyabinsk Province), Prisyazhnyuk (Moldavia), Aliev (Azerbaijan SSR), Stadnichenko (southern Ukraine), and Uvalieva and Soboleva described a new Bradybaena from the Zaliisky Alatau.

Investigations of the commercial utilization of the mollusks continued, especially in volume 2 of Invertebrate Zoology, edited by Poznanin and Shileiko entitled Commercial Mollusks. Other studies included that by Sadikhova (oysters, scallops, mussels), Konsulova (mussels), Golubev (pearl fishing), and Khomenko (cuttlefish). Nesis continued his studies on the Cephalopoda, contributing no fewer than 7 papers on distribution, systematics, and phylogeny.

Reproduction in mollusks was studied by Chukhchin (Littorina neritoides), Gal'perina et al. (Cerastoderma lamarcki), and Slavoshevskaya (Rissoacea). Behavioral studies were conducted by Naumov (Portlandica and Nuculana), Berger (Littorinidae), and several investigators reported on the behavior of the cephalopods including Shevtsova, Zuev and Shevchenko, Skalkin, and Filippova. The chromosomes of nudibranchs were studied by Roginskaya, and the problems of molluscicides and schistosome vectors by Karasev and Gorokhov, Gorokhov, and Raishite.

Biochemical studies were contributed by Nasedkina et al. (Cephalopoda), Goseeva et al. (Limnaea stagnalis), Osipovskii (Limnaeidae), Grigor'eva (Crenomytilus and Mizuhopecten), and on Mytilus by Marchenko, Fedyanin, Kandyuk, and Naidin et al.

From all this it is clear that much important malacological work is going on in the Soviet Union. The purpose of this series of listings is to bring at least indications of it to local students as quickly as possible.

Abbreviations and symbols we have used are:

AN - Akademiya nauk (Academy of Science)

ES - English Summary

GZ - Gidrobiol. Zhurnal (Hydrobiological Journal)

MVS - Materialy Vses. simpoz. po izuchennosti Chern. i Sredizemn. morei, ispol'z i okhrane ikh resursov, Sevastopol', Kiev, Nauk Dumka (Material from the All Union symposium for the study of the Black and Mediterranean seas and the use and protection of their resources).

TO — Otchetn. nauch. sessiya po itogam rabot, Zool. in-t. AN SSSR Tezisi dokl., Leningrad Nauka (Theses from the session for reports on scientific work of the Zoological Institute of the Academy of Science of the USSR, Leningrad).

VST – Vodoemy Sibiri i perspektivy ikh rybokhoz. ispol'z. Tomsk un-t. (Perspectives on the use of reservoirs for fisheries in Sibiria. Tomsk. Univ.).

ZEBF - Zhurnal Evolyutsionnoi biokhimii i Fiziologii (Journal of evolutionary biochemistry and physiology).

We thank Mrs. G. Dent for her careful typing of the manuscript.

# **GENERAL**

Drozdova, T. V.

1974. Organic matter in Recent and fossil shells. Trudi Biogeokhim. lab. In-t. geokhimii i analit. khimii AN SSSR 13: 235 - 269 [includes a survey of literature]

GOLUBEV, B F., A. B. ESIPOV & K. F. DUBROV

1974. Biological bases for the organization of a pearl (fishing) industry. Sbornik Trudi Vses. nauch. i proekt.-konstrukt. in-t. yuvelir. prom-sti. Vyp. 6, 80 - 84 [a method of pearl selection is described based on their formation]

GOROKHOV, V. V.

1973. Parasitic dipteran larvae in freshwater mollusks in Tuva and their possible use in the control of helminths. VST, 220 to 221 [Lymnaea auricularia can be controlled by infecting the snails with the larvae of predaceous flies. Observations were made in pools in the bed of the Kaa-Khema River]

KARASEV, N. F. & V. V. GOROKHOV

1974. The effect of molluscicides on the fauna and flora of biotopes of mollusks in the Berezinsky Preserve. Berezin. zapovednik, Vyp. 3, Minsk, Uradzhai, 65-70 [Dichlorosalicilanilid in the form of a 10% emulsified solution as well as several other chemicals including sodium pentachlorophenolate were used. Vegetation was restored from the 7th to 12th days while the first insects appeared on the 24th day after application. Mollusks were so adversely affected that they did not reappear until over a year (369 days) after the application.

KAZANNIKOV, E. A.

1973. Experimental application of contemporary methods for the diagnosis of species of freshwater mollusks. VST, 204 to 205 [an evaluation of diagnostic methods: the curvature of the frontal section of the valve is a poor diagnostic feature; electrophoresis is most important for interspecific and population studies]

KHOMENKO, L. P.

1973. Prospects of a commercial fishery for cuttlefish. Ryb. Kh-vo. 9: 13 - 14 [data provided on the depth distribution of cuttlefish in the Indian Ocean]

KONSULOVA, Ts.

1973. Experiments on the artificial rearing of mussels on the Black Sea coasts of Bulgaria. Ribno stopanstvo 20 (6): 5-7 (in Bulgarian)

Krest'yaninov, Yu. S.

1973. A terrarium for keeping living land snails. Vopr. Zoologii, Vyp. 3, Chelyabinsk, 26-29 [a terrarium is described with semi-automatic regulation of the moisture in the soil]

MINICHEV, YU. S.

1974. Chromosome counts and the systematics of gastropod mollusks. ZZ 53 (8): 1255 - 1257 (ES). [karyosystematic studies are superior to simple analyses of the chromosomatic apparatus, but karyology is only one of several methods and cannot by itself replace others, especially classical morphology]

NESIS, K. N.

1974. Evolution of living forms of cephalopod mollusks and the role of co-evolution in arogenesis [i. ε., the origin of new morphological types]. Byul. Molk. o-va ispyt. prirody. Otd. Geol. 49 (3): 153

PICHUGIN, A. P. & T. KH. TIBILOVA

1973. A color composition. In-t. Biol. Morya Dal'nevost. Tsentra AN SSSR. Premorsk. s.-kh. In-t. [a plastic color mixture is described which can be successfully applied as markings to moist live mollusks]

POZNANIN, L. P. & A. A. SHILEIKO

1973. Invertebrate Zoology. Vol. 2. Commercial mollusks. Itogi nauki i tekhn. VINITI AN SSSR, 156 pp. [contains the following papers: "The ecological classification (living forms) of cephalopods"; "Distribution and biology of squids"; "The cultivation of some features of the biology of bivalves".]

SADIKHOVA, I. A.

1973. The cultivation and some features of the biology of bivalves. Itogi nauki i tekhn. VINITI AN SSSR, 102 - 154 [the biology of commercial species (oysters, scallops, mussels) and ways of cultivating them in various countries are discussed]

SHVETSOVA, V. D.

1971. Biology and the squid (fishing) industry of the World Ocean. Moskva, 47 pp. [a treatment of the few commercial cephalopods in the Pacific Ocean: Ommastrephidae and Loliginidae. Basic are Todarodes pacificus and Ommastrephes bartrami. Loligo opalescens is important on the west coast of America; on the east coast, L. peali and O. bartrami. In the Mediterranean, L. vulgaris and O. bartrami. In the North Sea, L. forbesi and T. sagittatus. Yearly catch is about 1000 000 tons]

SKACHKOV, V. P. & G. S. ZHIROV

1973. Methods of gathering mollusks for collections.

Azov-Chernomorsk. NII mor. ryb. Kh-va i. okeanogr.

[a method of applying warm water or steam, together with a thorough shaking to free the mussels and remove the byssus, is described]

ZOLOTAREV, V. N.

1974. The determination of the growth and rate of growth of the mussel *Crenomytilus grayanus* (Dunker) according to the structure of the shell.

Dokl. Akad. Nauk SSSR 216 (5): 1195-1197

### MORPHOLOGY

ALIGADZHIEV, G. A.

1974. The average weight and size dimensions of bivalve mollusks from the northern Caspian. G. Z. 10 (2): 79 - 81

ALIMOV, A. F. & A. N. GOLIKOV

1974. Some patterns of the ratio between the size and weight in mollusks. ZZ 53 (4): 517 - 530 (ES) [a significant weight increase occurs at onset of sexual maturity without proportional increase in linear size]

## BURUKOVSKII, R. N. & A. N. VOVK

1974. Some problems of the oögenesis in the Northamerican squid Loligo pealei (Les.) on George's Bank. Arkhiv. anatomii, gistol. embriol. 66 (5): 44-50 (ES) [the development of the female gonads is described and a scale presented for the determination of the maturity of these structures]

#### KRAKATITSA, T. F.

1974. The relationship of linear proportions during ontogeny among Black Sea oysters, Ostrea edulis L. GZ 10 (3): 47 52 (ES)

#### MINICHEV, YU. S. & B. I. SIRENKO

1974. The development and evolution of the radula of chitons (Polyplacophora). ZZ 53 (8): 1133-1139 (ES) [a primitive radula appears in the trochophore as a single longitudinal row of chitinous lamellae which become hooked during fragmentation. Subsequently the hooks develop tips of flinty hardness. Lateral teeth appear as the result of continual fragmentation of single lamellae. It is assumed that during phylogenesis various stages of differing radulae appeared]

## NAIDIN, D. P., I. A. SADIKOVA & R. V. TEIS

1973. Effects of environmental temperatures on the crystalline composition of calcite in shells of the mussel (Mytilus grayana) in Peter the Great Bay, Sea of Japan. Okeanologiya 13 (4): 605-610 (ES)

### ROGINSKAYA, I. S.

1974. Chromosome numbers of 13 species of Nudibranchia from the White and Barents Seas. ZZ 53 (7): 998-1001 (ES) [haploid number is 13; diploid 26, which agrees with earlier authors. Dorid, onchidiid, okeniid, polycerid, dendronotid, coryphellid, flabellinid, cuthonid, eubranchid and aeolidiid species examined]

## SLAVOSHEVSKAYA, L. V.

1974. Comparative anatomical analysis of the reproductive apparatus of the Rissoacea (Gastropoda, Prosobranchia).
TO, 27-28

## Tolstikova, N. V.

1973. Systematic studies of the microstructure of the unionids. VST, 212-213 [it is suggested that the different types of structure of the periostracum, ectostracum, and endostracum are characteristic for genera, subfamilies, and families]

## TSIRULIS, T. P.

1974. The fine structure of the statocyst in the gastropod mollusk Clione limacina. ZEBF 10 (2): 181 - 188 (ES). [the receptor epithelium consists of gigantic primary sensory receptor cells]

#### ZOLOTAREV, V. N.

1974. The perennial rhythms of growth of the shells of Crenomytilus grayanus (Dunker). Ekologiya No. 3, 76 to 80. [in specimens from various areas of the Sea of Japan, there is a synchronized perennial fluctuation of the rate of growth every 10-15 years, possibly induced by the rhythmic changes of salinity]

## Zuev, G. V.

1973. Allometric growth of the brain in cephalopod mollusks. Biol. morya. Resh. mezhved. sb. Vyp. 31: 135 - 152 [the growth was characterized by negative allometry; the intensity of growth depends primarily on the degree of mobile activity. There is no relationship to the phylogenetic condition or the complexity of behavior]

# SYSTEMATICS AND FAUNISTICS

#### ALIEV, G. G.

1973. Terrestrial malacofauna of the Lesser Kavkaz territory of Azerbaijan SSR. AzSSR Elmlir Akad. Kheberleri Biol. Elmliri Ser. Izv. AN AzSSR. Ser. Biol. No. 4, 125 - 128 (Azerbaijan summary). [an investigation of the quantity and variety of land mollusks in various types of topography with a discussion of the ecological factors]

#### Dolgin, V. N. & B. G. IOGANZEN

1973. Freshwater mollusks of the Gidansk peninsula.

Nauch. Dokl. Vissh. Shkoli. Biol. no. 9: 16 - 19 [24 species of freshwater mollusks are found, of which 12 are reported for the first time. Data on the numbers and biomass of mollusks in various ecological stations are presented]

1973. On investigations of the freshwater molluscan fauna of the lower Ob. VST, 202. [52 species of which 7 are new for western Siberia and 18 observed for the first time; 40 species of mollusks in the USSR serve as food for fish]

1973. On the study of the freshwater mollusks of the lower region of the basin of the Taz [river]. GZ 9 (5): 61-63 [34 species, 21 gastropods and 11 bivalves; 13 species are fluvial, 13 in the accessory reservoirs, and 23 in other reservoirs. Compared to western Siberia, the Taz malacofauna is impoverished. Reasons for this are suggested]

#### FILATOVA, Z. A.

1974. On the bivalve mollusks of the deepwater trenches of the southern part of the Atlantic Ocean. Trudi In-ta okean.

AN SSSR 98: 270-276 (ES). [35 stations were made in the Southern Sandwich Trench, South Orkney Trench, and trenches in the northern part of the Sea of Scotia at depths to 8116 m; many new species were found]

## FROLOVA, E. S.

1973. Freshwater mollusks of northern Kazakhstan. VST, 214-215 [127 reservoirs of freshwater harbor more than 80 species of mollusks, 39 for the first time in the region. Caspiahydrobia johanseni and Anisus starobogatovi are new]

# GUNDRIZER, A. N., M. A. IVANOVA & E. A. NOVIKOV

1973. Freshwater mollusks of the reservoir at Tuv. VST 200 - 201 [32 species were found in the basins of the Great Little, and Upper Yenisei Rivers in the Ubsanuro and Koblo systems. Most were found in the Greater Yenisei: 6 Lymnaea, 8 Anisus, 6 Euglesa. The Palearctic species dominate (15), East Siberian (9), and Siberian (4)]

## IOGANZEN, B. G. & E. A. NOVIKOV

1973. Some results of investigations of freshwater mollusks of western Siberia. VST, 203 - 204 [continuation of study begun in 1965 produced more than 70 species not reported earlier. There are 120 species in all, 4 reported as new species but not listed by name]

#### IZZATULLAEV, Z.

1974. New and little known bivalve mollusks of the family Pisidiidae in Tadjikistan. ZZ 53 (7): 1086 - 1088 (ES) [5 species of Euglesa described, one new: E. turkestanica]